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Flying Operations

GENERAL FLIGHT RULES



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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AFI 11-202, Volume 3, 9 February 2001, is supplemented as follows:

This supplement establishes AETC general flight rules, which support AETC objectives. It applies to AETC, Air Force Reserve Command (AFRC), and Air National Guard (ANG) units that fly AETC training missions. For AFRC and ANG units, this instruction only applies to activities relating to the student training mission and instructor certification for that mission. Material that applies only to AFRC or ANG will be identified as such.

AETC units may supplement this instruction and will send a copy to HQ AETC/DOF for approval before publication. In addition, they will send one copy to HQ AETC/DOFV after publication. ANG and AFRC units will coordinate with the ANG/XO or AFRC/DO, respectively, before publication.

Unless otherwise specified, HQ AETC/DO is the overall waiver authority for this supplement. However, ANG/XO and AFRC/DO are the waiver authorities for their respective units. For waivers to unit supplements, the operations group commander (OG/CC) of the unit generating the supplement will handle waivers to that supplemental guidance, if used. AETC units will submit suggested improvements to this supplement on AF Form 847, **Recommendation for Change of Publication**, through command channels to HQ AETC/DOFV, 1 F Street, Suite 2, Randolph AFB TX 78150-4325. AFRC and ANG units will send comments and suggested improvements on AF Form 847 through channels to the AFRC/DO or ANG/XO, respectively. *NOTE:* For the AFRC and ANG portions of this supplement, the term "MAJCOM" is understood to be AFRC/DO and ANG/XO, respectively.

Maintain and dispose of records created as a result of prescribed processes in accordance with AFMAN 37-139, *Records Disposition Schedule*.

NOTES:

1. AETC aircrews temporarily under the operational control of another MAJCOM will comply with that MAJCOM's directives.

- 2. Air Force requirements are expressed through the basic AFI and this supplement. In the absence of AETC-specific guidance, mission series design (MDS)-specific guidance (or AETC-approved lead command guidance) will be followed.
- 3. Numbered Air Force (NAF) refers to the appropriate organization with jurisdiction over the aircraft. In the case of the Civil Air Patrol (CAP-USAF), Air University (AU) provides the oversight normally administered by a NAF.
- 4. For the 336 and 479 Training Group (TRG), OG/CC and wing commander (WG/CC) refer to the TRG/CC; operations group standardization/evaluation (stan/eval) (OGV) refers to 336 and 479 TRG/TGV.
- 5. For the 36 Rescue Flight (RQF), squadron commander (SQ/CC) refers to the flight commander (FLT/CC).
- 6. For CAP-USAF, OG/CC refers to the CAP-USAF/XO.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed. It renumbers paragraphs to align with the basic, makes unit supplements optional, and revises AFRC and ANG applicability. It adds bird hazard procedures (paragraph 2.1.1.11), the Airport Qualification Program (paragraph 2.1.1.12), the use of sectional charts (paragraph 2.1.1.13), and the source for AETC routine use airfields (paragraph 2.1.2). It revises GPS approach guidance (paragraph 5.8.3.4) and Table 9.2.

- 1.3.3.1. Units requesting exemptions or authorizations will route requests through stan/eval channels to HQ AETC/DO. ANG units gained by AETC will forward requests to ANG/XO; AFRC units gained by AETC will forward requests to AFRC/DO.
- 2.1.1.11. Units will develop procedures for risk assessment for bird hazards based on guidance in AFI 91-202/AETC Sup 1, *Hazardous Air Traffic Report (HATR) Program*. In addition to the resources listed in that AFI, the Avian Hazard Advisory System (AHAS) (http://www.ahas.com) may be used as an additional risk assessment aid. Planners, supervisors, and aircrews must use caution, however, when reviewing AHAS for risk levels. The risk levels presented are standardized and may not necessarily impact the specific aircraft or mission. The "Risk and BASH" link at the AHAS Web site should be consulted for more information on AHAS risk-level assignment.
- 2.1.1.12. (Added)(AETC) Copies of the Airport Qualification Program (AQP) book, which replaces the Airport Qualification Tape program. AFRC and ANG units will receive copies through MAJCOM channels. Aircrews will review pertinent information from the AQP book for missions scheduled to airfields listed. (This does not apply to helicopters.) Page copies or other reproductions are not authorized without permission of Jeppesen. An AQP review is not required for airfields on the routine-use airfield list.
- 2.1.1.13. (Added)(AETC) During mission planning, either sectional aeronautical charts or Portable Flight Planning Software (PFPS) or FalconView with Federal Aviation Administration (FAA) airspace displayed to identify the location and dimensions of designated FAA airspace in relation to any planned VFR route or military training route (MTR). In addition, applicable airfield approach control frequencies in the vicinity of Class B, C, and D airspace will be noted, as well as other civil or military airfields along the planned route of flight. The use of sectional aeronautical charts in flight is not required.
- 2.1.2.1. AETC aircrews will review the ASRR (and Air Mobility Command's [AMC] airfield database, if required) when planning missions to other than routine-use airfields. (*NOTE:* A routine-use airfield is

- defined as an airfield—civil, military, or joint use—used by a base to conduct operations on a regular basis, as determined by the OG/CC and under agreement with the airfield management.) HQ AETC/DOFR maintains a list of routine use airfields (with requirements for selection), and the list is published (by base) on the HQ AETC/DOFR Web site (https://www.aetc.af.mil/do/dof/dofr.htm).
- **2.1.2.1.1.** (Added)(AETC) "P" Code. Airfields listed in the ASRR with a "P" code have selected Jeppesen procedures approved for AMC use; however Jeppesen approaches are not approved for AETC use. Therefore, if a mission requirement dictates the use of an approach other than a DoD or National Aeronautical Charting Organization (NACO) approach, submit requests to 19 AF/CC through stan/eval channels.
- **2.1.2.1.2.** (Added)(AETC) "Q" Code. Operations into airfields listed in the ASRR with a "Q" code (that is, HQ AMC/DOAS approval) require OG/CC approval. Crews will reference the airfield database for details on "Q" code restrictions. If "Q" code restrictions do not apply to the operation being conducted (for example, a night restriction, but the mission lands and departs during daylight) or if HQ AMC/DOAS approval is not required if restrictions are briefed, OG/CC approval is not required.
- 2.1.2.1.3. (Added)(AETC) "Z" Code. Airfields listed in the ASRR with a "Z" code (that is, supplemental theater information file [STIF] entries exist) may have AETC-specific information and/or restrictions. Crews will reference the airfield database for details on STIF information. NOTE: AETC-**AETC** specific **STIF** entries are replicated on the stan/eval Web site at https://www.aetc.af.mil/do/dof/dofv.htm.
- 2.1.2.2. The OG/CC will ensure the airfield suitability and restrictions report (ASRR) is available to aircrews, mission planners, and other personnel who may require it.
- 2.1.2.3. The OG/CC will ensure personnel are properly trained on how to access and use the ASRR and AMC's Internet-based airfield database. *NOTE:* AMC's airfield database is only accessible from military computers via the Internet. During periods when Internet connectivity is lost, the requirement to review the airfield database will not be cause for mission cancellation.
- 2.2.4.2. All lead-MAJCOM validated and approved flight planning forms or logs are authorized for use by AETC and gained AFRC and ANG aircrew. Locally produced forms or logs require NAF/DO approval for AETC units.
- 2.2.4.4. All lead-MAJCOM validated and approved flight planning software and systems are authorized for AETC and gained AFRC and ANG aircraft. Aircraft for which AETC is the lead command (T-1, T-6, T-37, T-38, and T-43) are authorized to use flight planning software and systems approved and validated for use by the appropriate NAF/DO (for example, FPlan, PFPS, etc.).
- 2.3.1.2. Aircrews will obtain a weather briefing from the following sources, in order of precedence: (1) military base weather station, (2) a qualified FAA forecaster or flight weather service briefer (or equivalent, in an overseas area), or (3) the nearest flight service station for appropriate weather information. For local sorties, aircrew may obtain current weather and forecast information from a servicing operational weather squadron (OWS) Internet source or by telephone or fax from the above-listed sources, in the order of precedence shown. If aircrews have questions about the data obtained from an OWS Internet source, they will contact a forecaster to obtain information and clarification.
- 2.4.2. For aircraft where AETC is not the lead command, the guidance in the applicable AFI 11-2MDS-specific, Volume 3, will be followed. For passenger-carrying aircraft for which AETC is the lead command (that is, the T-1 and T-43), the NAF/DO is responsible for printed information guides specific to the applicable MDS aircraft.
- 2.5.1. AETC and gained AFRC and ANG aircraft are authorized to use portable global positioning

system units (PGU) subject to the restrictions outlined in paragraph 5.8.3.3 of the basic AFI.

- 2.5.1.2.2.1. The use of hand-held cameras or video recorders in single-seat aircraft is prohibited. The use of hand-held or helmet-mounted cameras or video recorders in the cockpit of other AETC or gained AFRC or ANG aircraft must be approved by the OG/CC. The individual using the camera or video recorder will not actively control the aircraft (*EXCEPTION*: Helmet-mounted cameras). The use of cameras or video recorders in the cargo or student compartment of AETC or gained AFRC or ANG aircraft is permitted with the approval of the aircraft commander.
- 2.5.4. Crewmembers will not wear rings, wigs, hairpieces, ornaments, barrettes, pins, clips, earrings, or any other item deemed potential foreign object damage (FOD) or safety hazards by the pilot in command (PIC) on the flight line or while performing duties at the aircraft. In addition, the PIC will ensure other passenger attire will not create a FOD or safety hazard. When aircrews wear helmets, their hair will not be so bulky that the helmet will not fit properly, nor will their hair interfere with the proper positioning of the helmet nape strap.
- 3.1.2.3. For local area flights that depart and terminate at the home or auxiliary field, aircrews may also use AF Form 4290, Aircraft Functional Check Flight Supersonic Event Log and Flight Order; AETC Forms 345A and 345B, Daily Flight Record/Order; or an overprinted DD Form 175, Military Flight Plan. Aircrews may also use a locally approved form or procedure that meets the minimum flight plan information requirements for the type of flight being planned and has been coordinated with base operations.
- 3.1.2.4. Aircrews may use locally developed procedures for commonly flown stereo routes for navigator or pilot training flights. These local procedures must meet the minimum flight plan requirements for the type of flight being planned and must be coordinated with base operations. *NOTE:* Aircraft conducting air defense activities may use scramble or airborne order flight plans. The air defense control facility (ADCF) and the flying unit will jointly prepare this flight plan, and the ADCF will file the flight plan with the appropriate air route traffic control center (ARTCC).
- 3.2.1. DD Form 175 is an approved passenger manifest form.
- 4.2.2.2. If AETC Form 345A or 345B is used, the pilot will signify receipt of duty desk weather and notice to airmen (NOTAM) information by logging the assigned aircraft tail number on the form. (This is not applicable if a local overprint has provisions for acknowledging weather and NOTAMs.)
- 4.3.1. AETC aircraft are authorized to land at P fields where a command letter of agreement (LOA) is in effect. The current command LOA airfield list is at https://www.aetc.af.mil/do/dof/dofr.htm. Contact HQ AETC/DOFR for a command-standard LOA template.
- 5.3.2. (Applicable to fixed-wing aircraft only) If, during an emergency, the only aircraft available to chase an emergency aircraft is dissimilar, comply with the following procedures:
- 5.3.2.1. (Added)(AETC) Assign chase duties to the most experienced formation-qualified instructor pilot (IP) available. *NOTE:* If no instructor is available, any formation-qualified pilot may fly chase.
- 5.3.2.2. (Added)(AETC) Maintain a vertical separation of 1,000 feet from the emergency aircraft until visual contact is established.
- 5.3.2.3. (Added)(AETC) Avoid areas of jetwash and wingtip vortices.
- 5.3.2.4. (Added)(AETC) Maintain continuous radio contact between aircraft.
- 5.3.2.5. (Added)(AETC) Fly no slower than final turn airspeed (while maneuvering to land) or final approach airspeed (while on final approach) for the aircraft with the higher speed requirement.

- 5.3.2.6. (Added)(AETC) Conduct chase only during day VMC.
- 5.3.2.7. (Added)(AETC) When possible, coordinate with the supervisor of flying (SOF).
- 5.3.3. (Not applicable to air-refueling formations) Aircrew may fly a dissimilar formation if required to maintain currency, fulfill upgrade training requirements, or comply with syllabus requirements. All participants will be fully briefed prior to engaging in a dissimilar formation.
- 5.8.1. Units will follow guidance in the applicable AFI 11-2MDS-specific, Volume 3, for en route area navigation (RNAV) criteria and procedures for their particular aircraft.
- 5.8.2. Units will follow the guidance in the applicable AFI 11-2MDS-specific, Volume 3, for self-contained approach criteria and procedures for their particular aircraft. The use of unpublished self-contained approaches in instrument meteorological conditions (IMC) is prohibited for all aircraft without NAF/DO approval (for AETC units). The appropriate MAJCOM/DO is the approval authority for AFRC and ANG units gained by AETC.
- 5.8.3.1.1. Aircrew may use mission enhancement systems for en route instrument navigation if the aircraft global positioning system (GPS) is used to update a self-contained navigation system (for example, inertial navigation system [INS], mission computer, etc.) and the aircraft's position can be verified by a stand-alone system (for example, navigational aids [NAVAID] or a navigator or electronic warfare officer [EWO]).
- 5.8.3.2. Units will follow the guidance in the applicable AFI 11-2MDS-specific volume (or other appropriate lead-command guidance). Otherwise, any GPS system meeting the requirements and specifications of FAA TSO C-129A, *Airborne Supplemental Navigation Equipment Using the Global Positioning System (GPS)*, is authorized for use as the primary navigational source while flying under instrument flight rules (IFR).
- 5.8.3.3.4. The software used in PGUs with a moving map display must be tested and approved by the lead command.
- 5.8.3.3.7. Units are authorized to use lead-command training materials and programs. In lieu of lead-command guidance, units are authorized to develop and use PGU training programs that have been approved by the appropriate NAF. ANG/XO and AFRC/DO are the waiver authorities for their respective units.
- 5.8.3.4. GPS overlay approaches are authorized for training use only. Units will follow the guidance in the applicable AFI 11-2MDS-specific volume (or other appropriate lead-command guidance). Only Phase III ("or GPS" in the title) approaches contained in NACO flight information publications (FLIP) are authorized to be flown as overlay approaches in the United States. Overlay approaches flown using GPS must be retrieved from a valid navigation database and will not be manually entered.
- 5.9.1.3. (Applicable to fixed-wing aircraft only) Aircrews will not fly approaches to or land at uncontrolled airfields without OG/CC approval. The OG/CC may publish uncontrolled airfield procedures in a local supplement.
- **5.9.1.4.** (Added)(AETC) Other Prohibitions. (Applicable to fixed-wing aircraft only) Aircrews will not take off or land over an approach end cable that has been reported as loose or slack. Additionally, landing over a raised barrier is prohibited.
- 5.10.2. Cell formations of up to six aircraft are exempt from adhering to established VFR cruising altitudes (FAA Waiver #133 I). This exemption also applies to individual aircraft and cell formations operating at or above 12,000 feet mean sea level (MSL) within approved refueling anchors and refueling tracks.

- 5.13.3. The use of vision restricting devices is approved if required for continuation or student training as defined by the applicable AFI 11-2MDS-specific, Volume 1, or approved training syllabus. If vision restricting devices are authorized, the requirements in paragraph 5.13.1 of the basic AFI also apply.
- 5.13.3.1. The use of vision restricting devices is approved for takeoffs and landings if required for continuation or student training as defined by the applicable AFI 11-2MDS-specific, Volume 1, or approved training syllabus. For takeoffs and landings, pilots using vision restricting devices must be under the direct supervision of a current and qualified IP with full view of the instruments and immediate access to the flight controls.
- 5.14.1.1. Unless allowed by the applicable AFI 11-2MDS-specific guidance or training syllabus, aircrews will not perform emergency procedures at night or when in IMC.
- 5.14.2.1. Normally, pilots will not practice simulated emergency procedures unless an IP or flight examiner is seated at <u>and</u> has immediate access to a set of aircraft flight controls. Pilots current or upgrading in single-seat aircraft may practice emergency procedures according to the applicable AFI 11-2MDS-specific guidance. For dual-pilot aircraft, deviations from this requirement are approved if specifically addressed in the applicable AFI 11-2MDS-specific guidance.
- 5.14.2.2. Except for functional check flight (FCF) missions and formal course syllabus requirements, inflight engine shutdowns will not be performed.
- 5.14.2.3. (Applicable to fixed-wing aircraft only) The practice of fixed-wing simulated flameout (SFO) approaches is allowed when specifically addressed in AFI 11-2MDS-specific guidance or applicable syllabus and the guidance conforms with requirements in the basic AFI.
- 5.15.2. (Not applicable to helicopters) Aircrews may accomplish touch-and-go landings if required for continuation training (as defined in the applicable AFI 11-2MDS-specific volume), formal syllabus training requirements (as defined in the applicable training syllabus), or functional or operational test flights (as directed by the applicable technical order [TO]).
- 5.15.3. Aircrews will follow guidance for touch-and-go landings in the applicable AFI 11-2MDS-specific volume, training syllabus, or flight manual (TO).
- 5.16.2. AETC aircrews will follow guidance for airdrops as defined in the applicable AFI 11-2MDS-specific volume.
- 5.17.1. Reduced or light-out operations are authorized for continuation or formal syllabus training as defined by the applicable AFI 11-2MDS-specific volume or training syllabus.
- 5.17.1.1. Formation flights are authorized to vary their lighting configuration based on valid requirements as outlined in the applicable AFI 11-2MDS-specific volume or training syllabus. Pilots operating with varied lighting configurations outside restricted or warning areas must ensure the entire formation can be visually identified by nonparticipating aircraft.
- 5.20. The use of all tobacco products is prohibited in AETC and gained AFRC and ANG aircraft.
- 5.21. Units will follow local published procedures for handling aircraft that land with hot armament.
- 5.22.2. Aircrews will follow FLIP guidance on when to file air reports (AIREP).
- 5.26. Aircrews will follow lead-MAJCOM guidance for the use of night vision goggles (NVG) as outlined in the applicable AFI 11-2MDS-specific volume or training syllabus.
- 5.28. (Applicable to fixed-wing aircraft) Unless otherwise required by a formal syllabus or currency or training requirements (as defined in the applicable AFI 11-2MDS-specific volume), the preferred night instrument approach procedures (in order of precedence) are as follows: precision approach,

nonprecision approach, VFR straight-in, and VFR rectangular pattern. When available, the glideslope position will be monitored with the visual descent path indicator during visual approaches and with the instrument landing system (ILS) glide slope during instrument approaches.

- 6.2. AETC requirements for life support equipment are prescribed in AETCI 11-301, AETC Aircrew Life Support (ALS) Program.
- 6.2.2. (Added)(AETC) In the absence of AFI 11-2 MDS-specific guidance, the following requirements apply:
- 6.2.2.1. (Added)(AETC) Each occupant over 2 years of age will have an approved seat equipped with a seat belt.
- 6.2.2.2. (Added)(AETC) Occupants must wear a shoulder harness (if installed) with the seat belt during takeoff and landing.
- 6.2.2.3. (Added)(AETC) Gunner belts are approved for crew in the cabin of rotary wing aircraft.
- 6.2.2.4. (Added)(AETC) Each occupant should wear a seat belt when seated during flight to avoid possible injury due to sudden turbulence.
- 6.2.2.5. (Added)(AETC) As an additional precaution, aircraft occupants will wear a seatbelt as follows:
- 6.2.2.5.1. (Added)(AETC) When directed by the PIC.
- 6.2.2.5.2. (Added)(AETC) During taxi and for all takeoffs and landings.
- 6.2.2.5.3. (Added)(AETC) When seated in an ejection seat.
- 6.2.2.5.4. (Added)(AETC) When in the cockpit of nonejection seat aircraft in flight. *NOTE*: Instructors or evaluators may unbuckle only when performing their duty.
- 6.2.2.5.5. (Added)(AETC) During air refueling, except when it is normal to be out of restraints during the event or while on an approved orientation program under the supervision of a crewmember.
- 8.1.1.1. Aircrews may fly Category II and III approaches when they have been certified according to lead-command guidance.
- 8.1.2.2. HQ AETC/DOF is the approval authority to allow units to practice instrument approaches under VFR. Units will forward a request through stan/eval channels to HQ AETC/DOF.
- 8.4.3. An airfield is considered to be a remote or island destination when its location prevents further flight to a suitable alternate. Unless specifically addressed in AFI 11-2MDS-specific guidance, aircrews will not hold in lieu of an alternate for remote or island destinations for which designating an alternate is not possible.
- 8.6. Unless specifically addressed in AFI 11-2MDS-specific guidance, aircrews will not take off when the weather is lower than the published landing minimums. This guidance is considered valid for AETC aircrews only if it prescribes substitute recovery procedures.
- 8.13.2.2. Unless specifically prohibited by AFI 11-2MDS-specific guidance, aircrews are authorized to continue a published instrument approach when the weather is below minimums.
- 8.13.3.2. Aircrews will follow AFI 11-2MDS-specific guidance for the use of radar altimeters during instrument approaches. If guidance is not provided, aircrews will set radar altimeters to the appropriate height above touchdown (HAT) or height above aerodrome (HAA) for the approach being flown.
- 8.14.1. If weather is obtained from the Automated Weather Distribution System or Automated Terminal Information Service, prevailing visibility will be determined from the surface observation or reported

tower observation, whichever is lower.

- 8.15. "VFR on top" operations are prohibited unless prescribed in AFI 11-2MDS-specific or syllabus guidance.
- 8.16.1. Aircraft and equipment that have been certified by lead commands for operations within minimum navigation performance specifications (MNPS) airspace are considered approved by AETC.
- 9.2.2. (For AFRC and ANG only) Plan to perform flight duty during normal sleeping hours or across multiple time zones to minimize the effects of circadian dysrhythmia and fatigue. Normally, do not require crewmembers who are transiting more than four time zones en route to a permanent detachment or deployed operating location to perform flight duty within 48 hours after arrival at their destination. This consideration is particularly important for single-pilot aircraft operations. When on higher headquarters missions, units with C-130, HC/MC-130, C-5, C-17, and KC-135 aircraft will follow crew rest requirements in the applicable AFI 11-2MDS-specific guidance.
- 9.4.3. For T-6, T-37, and T-38 aircraft, an augmented crew is two qualified pilots (excluding pilot instructor training [PIT]) flying together. For the T-1, an augmented crew is three qualified pilots or two IP and a student. Augmented crews are not authorized for fighter, attack, bomber, or reconnaissance aircraft. Augmented crews for airlift (C-5, C-130, EC-130, and C-17), operational support aircraft, and tankers (KC-135) will refer to AFI 11-2 MDS-specific guidance.
- 9.4.5. (For ANG only) During local- and higher headquarters-directed exercise participation, each ANG aircrew member will review his or her schedule to ensure compliance with crew rest. For nonflying aircraft generation scenarios (Phase I), aircrews do not require crew rest to accept aircraft. (This is in accordance with the ANG Supplement 1 to AFI 11-401, Flight Management.)
- 9.4.6. (For AFRC and ANG only) For aircrew members, the flight duty period includes both military duty and civilian work period. It begins when the individual (military or civilian) reports for his or her first duty of the day. Flight duty periods end at engine shutdown at the end of the mission or series of missions. However, time spent in the completion of duties will not count as crew rest toward the next flight duty period.
- **9.4.8.** (Added)(AETC) Solo. A pilot flying alone or with a passenger.
- **9.4.9.** (Added)(AETC) Dual. A flight with two rated pilots or an IP with a student on an instructional flight.
- **9.4.10.** (Added)(AETC) Instructional Flight. A flight with an IP and a student enrolled in a formal course of training or a required training flight with a student and an IP.
- 9.4.11. (Added)(AETC) Daylight. The period between official sunrise and official sunset.
- **9.4.12.** (Added)(AETC) Extended Daylight. The periods 15 minutes before official sunrise and 15 minutes after official sunset. Extended daylight time is counted as daylight for the purpose of calculating maximum flying time.
- **9.5.1.** (Added)(AETC) Alert or Standby and Compensatory Periods. AETC aircrews will use the guidance on alert or standby and compensatory periods prescribed in the applicable AFI 11-2MDS-specific volume. If no guidance is available, the following applies (paragraphs 9.5.1.1 through 9.5.1.4 [Added][AETC]):
- 9.5.1.1. (Added)(AETC) Aircrews will not be scheduled for more than 96 hours of continuous alert or standby duty.
- 9.5.1.2. (Added)(AETC) The initial flight duty period for alert or standby crews is a maximum of 12

- hours and begins with the first squadron duty or alert or standby changeover briefing, whichever comes first. After obtaining crew rest, subsequent flight duty periods will begin with any official tasking, but will not exceed 12 hours.
- 9.5.1.3. (Added)(AETC) While on alert or standby, fixed-wing aircrews are limited to three sorties during any flight duty period. No day or night sortie combination limit applies to aircrews on alert or standby. The OG/CC will determine sortie limits for aircrew conducting search and rescue or disaster relief operations.
- 9.5.1.4. (Added)(AETC) Alert or standby crews will be granted 1 hour of free time for every 3 hours of alert or standby not to exceed 72 hours.
- **9.5.2.** (Added)(AETC) Crew Rest and Crew Duty for Air Defense Alert. (For AFRC and ANG only) The following requirements apply (paragraphs 9.5.2.1 through 9.5.2.6 [Added][AETC]):
- **9.5.2.1.** (Added)(AETC) Flight Duty on Alert. The initial flight duty period is a maximum of 12 hours (14 hours, if waived according to paragraph 9.10.1 of the basic AFI) and begins with the first squadron duty, alert changeover briefing, or AFRC or ANG civilian work, whichever occurs first. After getting crew rest on alert (according to paragraph 9.5.2.2 [Added][AETC], this supplement), subsequent flight duty periods begin with any official tasking and will not exceed 12 hour, as follows:
- 9.5.2.1.1. (Added)(AETC) Planned tasking (training sorties, aircraft swaps, etc.) will not exceed the flight duty period. If an active air defense mission results in an aircrew member exceeding the flight duty period, either replace the individual or put the individual on mandatory status until crew rest is obtained.
- 9.5.2.1.2. (Added)(AETC) Except for active flying tasking, alert crews will not be disturbed from 2200 to 0600 local time. For any planned missions (active air or training) that start during or extend into the period 2200 to 0600 local time, all possible attempts will be made to notify aircrew members in enough time for mission preparation and crew rest.
- **9.5.2.2.** (Added)(AETC) Crew Rest on Alert. Once provided the opportunity for at least 8 hours of uninterrupted rest, an aircrew member may start a new alert flight duty period.
- **9.5.2.3.** (Added)(AETC) Restricted Status. If the air defense sector and the unit determine they need to place an aircrew member into crew rest due to probable future taskings, they may place the unit on restricted status. When on restricted status, alert crews will be in crew rest. This is different than mandatory status and does not require up-channel reporting or prevent other higher-headquarters tasking.
- **9.5.2.4.** (Added) AETC) Sortie Limits. An aircrew member may fly up to three sorties during a flight duty period. (See Table 9.1, Note 1, of the basic AFI for training sortie day/night combination limits.) Active air defense scrambles do not have a day/night combination limit. Upon reaching the sortie limit, the aircrew member will either be replaced or put on mandatory status until crew rest is obtained.
- **9.5.2.5.** (Added)(AETC) Post-Alert Status. An alert aircrew member may perform a normal flight duty period if he or she complies with crew rest requirements. The post-alert duty day begins at changeover, scramble activity (including battle stations or a "suit-up" call), or other official tasking, whichever comes first.
- **9.5.2.6.** (Added)(AETC) Supervisory or SOF Duties. Squadron supervisors recalled to perform supervisory or SOF duties during an active flying tasking need not meet crew rest requirements for that duty, but they must obtain required crew rest before returning to normal duty.
- 9.6. (For AFRC and ANG only) The following requirements apply (paragraphs 9.6.1 through 9.6.3

[Added][AETC]):

- 9.6.1. (Added)(AETC) By waiver authority (paragraph 9.10 of the basic AFI), the directors of AFRC and ANG have reduced the crew rest period to 10 hours for home station continuation training sorties and other duties provided the crewmember obtains 8 hours of uninterrupted rest. All other sorties or missions require 12 hours of crew rest.
- 9.6.2. (Added)(AETC) Crew rest for successive flight activity will not begin sooner than 1 hour after the final landing from a previous flight activity or when the last crewmember leaves after completing related aircrew duties.
- 9.6.3. (Added)(AETC) Commanders should give aircrew members a minimum of 24 hours of crew rest following three consecutive flight duty periods of 16 hours or more with minimum crew rest between flights.
- 9.7. See Table 9.2 (Added)(AETC), this supplement, for maximum flying times.

Table 9.2. (Added)(AETC) Maximum Flying Times.

Ι	A	В	С	D
T				
E		Flying Time During	Flying Hours Per 7	Hours Per 30
M	Aircraft	Flight Duty Period	Consecutive Days	Consecutive Days
1	C-5, C-17, C-21,	12 hours total (note 1)	50 (note 1)	125
	and C-130			
2	F-15 and F-16	8 hours total;	30 (note 4)	75 (note 4)
	(notes 2 and 3)	5 hours instructional		
3	H-1	12 hours total	50 (note 1)	125
4	HH-60	16 hours augmented		
		crew;		
		14 hours total (12 hours		
		without operational		
		AFCS);		
		12 hours instructional or		
		FCF		
5	H/MC-130H/P	16 hours total;		
	(note 5)	12 hours tactical, FCF,		
		or inoperative autopilot		
6	KC-135	12 hours total (note 1)		
7	MH-53J	16 hours augmented		
		crew;		
		14 hours total (12		
		without operational		
		AFCS);		
		12 hours instructional or		
		FCF		
8	T-1 (note 6)	8 hours total;	45 (note 4)	90 (note 4)
		6.5 hours instructional		

I	A	В	C	D
T				
\mathbf{E}		Flying Time During	Flying Hours Per 7	Hours Per 30
M	Aircraft	Flight Duty Period	Consecutive Days	Consecutive Days
9	T-6	8 total hours;	30 (note 4)	75 (note 4)
		5.5 hours instructional		
		or FCF		
10	T-37 and T-38	6.5 total hours;		
	(note 7)	5 hours FCF or		
		4.5 hours instructional		
11	T-43	10 hours basic crew	50	125
		without autopilot (6		
		hours actual weather);		
		12 hours basic crew		
		with autopilot (10 hours		
		actual weather)		

NOTES:

- 1. See AFI 11-2MDS-specific guidance for operational missions.
- 2. For single-seat fighters, if any flying is done at night the maximum flight duty period is 10 hours (12 hours for dual-seat fighters with two qualified pilots on board). If either sortie is flown at night, fighter aircrews will be limited to two sorties per flight duty period; otherwise, they will be limited to three sorties per flight duty period. Shortened sortie lengths may occur because of weather, maintenance, or other orientation-type profiles (for example, Air Force Reserve Officer Training Corps [AFROTC] or spouse); and, with OG/CC approval, aircrews may fly a maximum of four sorties.
- 3. The maximum flying time for fighter aircrew is 200 hours per calendar quarter.
- 4. The OG/CC may waive the 7-day maximum time on a case-by-case basis. For weapon systems for which the 30-day maximum time is less than 125 hours, supervisors may also waive the 30-day maximum time (up to 125 hours).
- 5. For H/MC-130H/P operations, the basic flight duty period for an augmented crew is 20 hours. Aircrews may fly air refueling for the first 18 hours and tactical events, FCFs, or autopilot inoperative for 16 hours.
- 6. The maximum flying and simulator time during the flight duty period is 8 hours, but the last 1.5 hours cannot be flown as an IP on an instructional flight. Aircrews may fly any combination as long as they do not exceed the respective maximums.
- 7. The maximum flying and simulator time during the flight duty period is 6.5 total hours, but the last 1.5 hours may not be flown as an IP on a student flight. Aircrews may fly any combination if they do not exceed the respective maximums. Waiver authority is the NAF/CC.
- 9.8.1. (Added)(AETC) AETC aircrews will use the guidance in the applicable AFI 11-2MDS-specific volume. If no guidance is provided, the guidance in Table 9.1 of the basic AFI will be followed.
- 9.8.2. (Added)(AETC) The following requirements apply (paragraphs 9.8.2.1 through 9.8.2.4 [Added][AETC]):
- 9.8.2.1. (Added)(AETC) Wing and/or AETC air commanders may extend the maximum flight duty

period in the basic AFI, Table 9.1, Basic Aircrew column, by 2 hours. Fighter, attack, bomber, and reconnaissance unit commanders may delegate this waiver authority no lower than the OG/CC or air operations officer. Tanker, transport, and rescue unit commanders may delegate this authority no lower than the SQ/CC for tactical operations or the aircraft commander for nontactical operational missions. Issuance of the waiver will be noted on the daily flight order, local flight clearance, SOF log, or command post duty log. Waivers will be issued on a by-name basis only. Blanket waiver statements are not acceptable. The AFRC/DO or ANG/XO must authorize crew duty waivers beyond 2 hours.

- 9.8.2.2. (Added)(AETC) Fighter, attack, reconnaissance, and bombers are limited to three daytime sorties per flight duty period or two sorties if one sortie is flown at night.
- 9.8.2.3. (Added)(AETC) During operational readiness inspections or unit operational evaluations, aircrew members are limited to four daytime sorties per flight duty period or three sorties if any sortie is flown at night.
- 9.8.2.4. (Added)(AETC) Aircrew members deploying or redeploying outside the continental United States, participating in North American Aerospace Defense Command (NORAD) or Air Force Iceland exercises, or on an active air defense alert are limited to three sorties per flight duty period. However, these aircrew members do not have a day/night combination limit.
- 9.9.3.5. (Added)(AETC) Undergraduate flying training (UFT) instructors will not fly a night instructional sortie as the third flight or flight-related activity (runway supervisor unit, SOF, or simulator) of the duty day. The OG/CC may waive this restriction on a case-by-case basis. IPs will not fly with students or act as PIC outside the extended daylight period (as defined in paragraph 9.4.12 (Added)(AETC) of this supplement) until they have completed the local night checkout.
- 9.10.1. The NAF/CC may waive minimum crew rest periods on a case-by-case basis.
- 9.12. Forms Adopted. DD Form 175, AF Forms 847 and 4090, and AETC Forms 345A and 345B.

NOTE: The following are added to Attachment 1:

References (Added)(AETC)

AETCI 11-301, AETC Aircrew Life Support (ALS) Program

AFI 11-401/AETC Sup 1, Flight Management

Abbreviations and Acronyms (Added)(AETC)

ADCF—air defense control facility

AFCS—automated flight control system

AHAS—Avian Hazard Advisory System

AMC—Air Mobility Command

AQP—Airport Qualification Program

CAP-USAF—Civil Air Patrol-US Air Force

FCF—functional check flight

FOD—foreign object damage

IP—instructor pilot

LOA—letter of agreement

MDS—mission design series

NACO—National Aeronautical Charting Organization

NAF—numbered Air Force

OG/CC—operations group commander

OWS—Operational Weather Squadron

PFPS—portable flight planning software

PIC—pilot in command

SOF—supervisor of flying

SQ/CC—squadron commander

STIF—supplemental theater information file

TRG—training group

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